

What is claimed is:

1. A data storage device for use in a power integrated network, the data storage device comprising:

- 5           a memory configured to store data;  
              a control module coupled to the memory, the control module for controlling the transmission of data from the memory to the power integrated network and the storage of data received from the power integrated network in the memory; and  
10           a power module coupled to the memory and the control module, the power module receiving power from the power integrated network to energize the data storage device.

2. A data storage device according to claim 1, further comprising a network interface coupled to the control module, the network interface configured to communicate with the power integrated network.

15           3. A data storage device according to claim 1, wherein the control module packages data for transmission over the power integrated network.

20           4. A data storage device according to claim 1, wherein the power integrated network is a Power Ethernet network.

25           5. A data storage device according to claim 1, wherein the memory is a device including a SCSI interface.

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6. A data storage device according to claim 1, wherein the power module includes a power converter for converting the power received from the power integrated network from a first voltage level to a second voltage level.
- 5 7. A data storage device according to claim 6, wherein the second voltage level is lower than the first voltage level.
8. A method for providing data storage in a power integrated network, the method comprising:
- 10 coupling a data storage device to the power integrated network, the data storage device configured to communicate with the power integrated network;
- receiving data and power at the data storage device from the power integrated network; and
- 15 using the power received from the power integrated network to energize the data storage device.
9. A method according to claim 8, wherein the power integrated network is a Power Ethernet network.
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10. A method according to claim 8, further comprising converting the power received from the power integrated network from a first voltage level to a second voltage level.
- 25 11. A method according to claim 10, wherein the second voltage level is lower than the first voltage level.

12. A system for providing data storage in a communication network, the system comprising;

a first power integrated network that provides data and power;

a specified network coupled to the first power integrated network

5 so that data may be transmitted from and received by the first power integrated network across the specified network;

a second power integrated network that provides data and power coupled to the specified network so that data may be transmitted from and received by the second power integrated network across the specified network;

10 a first data storage device coupled to the first power integrated network, the first data storage device configured to communicate with the first power integrated network and to receive power from the first power integrated network; and

a second data storage device coupled to the second power

15 integrated network, the second data storage device configured to communicate with the second power integrated network and to receive power from the second power integrated network.

13. A system according to claim 12, wherein the first storage device and the

20 second storage device are in a RAID configuration.

14. A system according to claim 12, wherein the first power integrated

network is a Power Ethernet network.

25 15. A system according to claim 12, wherein the second power integrated network is a Power Ethernet network.

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16. A system according to claim 12, wherein the specified network is the Internet.
17. A system according to claim 12, wherein the first data storage device  
5 comprises:  
a memory configured to store data;  
a control module coupled to the memory, the control module for  
controlling the transmission of data from the memory to the first power  
integrated network and the storage of data received from the first power  
10 integrated network in the memory; and  
a power module coupled to the memory area and the control  
module, the power module receiving power from the first power integrated  
network.
- 15 18. A system according to claim 17, wherein the first data storage device  
further includes a network interface coupled to the control module, the network  
interface configured to communicate with the first power integrated network.
19. A system according to claim 17, wherein the control module packages  
20 data for transmission over the first power integrated network.
20. A system according to claim 17, wherein the memory area is a device  
including a SCSI interface.
- 25 21. A system according to claim 17, wherein the power module includes a  
power converter for converting the power received from the first power  
integrated network from a first voltage level to a second voltage level.

22. A system according to claim 21, wherein the second voltage level is lower than the first voltage level.
23. A system according to claim 12, wherein the second data storage device  
5 comprises:  
a memory configured to store data;  
a control module coupled to the memory for controlling the transmission of data from the memory to the second power integrated network and the storage of data received from the second power integrated network in  
10 the memory; and  
a power module coupled to the memory area and the control module, the power module receiving power from the second power integrated network.
- 15 24. A system according to claim 23, wherein the second data storage device further includes a network interface coupled to the control module, the network interface configured to communicate with the second power integrated network.
25. A system according to claim 23, wherein the control module packages  
20 data for transmission over the second power integrated network.
26. A system according to claim 23, wherein the memory area is a device including a SCSI interface.
- 25 27. A system according to claim 23, wherein the power module includes a power converter for converting the power received from the power integrated network from a first voltage level to a second voltage level.

28. A system according to claim 27, wherein the first voltage level is lower than the second voltage level.

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